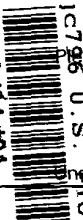


12/11/01



Please type a plus (+) inside this box -



12-14-01

Ausk

PTO/SB/29 (12/97)

Approved for use through 09/30/00. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>UTILITY PATENT APPLICATION TRANSMITTAL</b>  (Only for new nonprovisional applications under 37 CFR 1.53(b))	Attorney Docket No.	9080-016-999	Total Pages	276
	First Named Inventor or Application Identifier			
	Jonathan A. Usuka, et al.			
	Express Mail Label No.	EL 340 685 029 US		

<b>APPLICATION ELEMENTS</b> See MPEP chapter 600 concerning utility patent application contents.	<b>ADDRESS TO:</b> Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
---	---

<p>1. <input checked="" type="checkbox"/> Fee Transmittal Form <i>Submit an original, and a duplicate for fee processing!</i></p> <p>2. <input checked="" type="checkbox"/> Specification (Total Pages <u>66</u>) <i>(preferred arrangement set forth below)</i></p> <ul style="list-style-type: none"><li>-Descriptive title of the Invention</li><li>-Cross Reference to Related Applications</li><li>-Statement Regarding Fed sponsored R&amp;D</li><li>-Reference to Microfiche Appendix</li><li>-Background of the Invention</li><li>-Brief Summary of the Invention</li><li>-Brief Description of the Drawings (if filed)</li><li>-Detailed Description of the Invention (including drawings, if filed)</li><li>-Claim(s)</li><li>-Abstract of the Disclosure</li></ul> <p>3. Drawing(s) (35 USC 113) (Total Sheets <u>15</u>)</p> <p>4. <input checked="" type="checkbox"/> Oath or Declaration (unexecuted) (Total Sheets <u>2</u>)</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Newly executed (original or copy)</li><li><input checked="" type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) <i>(for continuation/divisional with Box 17 completed)</i> <i>[Note Box 5 below]</i></li><li><input type="checkbox"/> <u>DELETION OF INVENTORS(S)</u> Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33 (b).</li></ul> <p>5. Incorporation By Reference (useable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.</p>	<p>6. <input type="checkbox"/> Microfiche Computer Program (Appendix)</p> <p>7. <input type="checkbox"/> Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)</p> <ul style="list-style-type: none"><li>a. <input type="checkbox"/> Computer Readable Copy</li><li>b. <input type="checkbox"/> Paper Copy (identical to computer copy)</li><li>c. <input type="checkbox"/> Statement verifying identity of above copies</li></ul>
--	--

**ACCOMPANYING APPLICATION PARTS**

8. ☐ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
*(when there is an assignee)*
10. ☐ English Translation Document (if applicable)
11. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503)  
*(Should be specifically itemized)*
14. ☐ Applicant claims Small Entity status, see 37 C.F.R. § 1.27
15. ☐ Certified Copy of Priority Document(s)  
*(if foreign priority is claimed)*
16. ☒ Other: Submission of Compact Disc  
2 Compact Discs

**17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:**

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No: 09/737,918 filed December 15, 2000.

**18. CORRESPONDENCE ADDRESS**

Customer Number: 	24341 <i>(Insert Customer No. or Attach bar code label here)</i>	<input type="checkbox"/> Correspondence address below	
NAME			
ADDRESS			
CITY		STATE	ZIP CODE
COUNTRY		TELEPHONE	FAX

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

The PTO did not receive the following listed item(s) Return post card

**PENNIE & EDMONDS LLP**

COUNSELLORS AT LAW  
3300 Hillview Avenue  
Palo Alto, CA. 94304

ATTORNEY DOCKET NO. 9080-016-999Date: December 11, 2001

Assistant Commissioner for Patents  
Box PATENT APPLICATION  
Washington, D.C. 20231

Sir:

The following utility patent application is enclosed for filing:

Applicant(s): Jonathan A. Usuka, Andrew Grupe and Gary Allen Executed on: Unexecuted  
Peltz

Title of Invention: SYSTEM AND METHOD FOR PREDICTING CHROMOSOMAL REGIONS THAT CONTROL  
PHENOTYPIC TRAITS

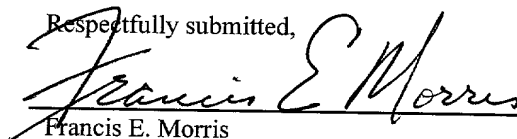
**PATENT APPLICATION FEE VALUE**

TYPE	NO. FILED	LESS	EXTRA	EXTRA RATE	FEE
Total Claims	71	-20	51	\$18.00 each	\$ 918.00
Independent	10	-3	7	\$84.00 each	\$ 588.00
Minimum Fee					\$ 740.00
Multiple Dependency Fee If Applicable (\$280.00)					\$ 0.00
<b>Total</b>					\$ 2,246.00
Applicant qualifies for the 50% Reduction for Independent Inventor, Nonprofit Organization or Small Business Concern					- \$ 0.00
<b>Total Filing Fee</b>					\$ 2,246.00

- ☐ **DO NOT PUBLISH.** I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).
- ☐ Priority of application no. filed on in is claimed under 35 U.S.C. § 119.
- ☐ The certified copy of the priority application has been filed in application no. filed
- ☐ Amend the specification by inserting before the first line the following sentence: This is a continuation-in-part of application no. filed .

enclosed. Please charge the required fee to Pennie & Edmonds LLP Deposit Account No. 16-1150. A copy of this sheet is

Respectfully submitted,



Francis E. Morris  
PENNIE & EDMONDS LLP

24,615  
(Reg. No.)

Enclosure

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: Jonathan Usuka et al.

Serial No.: To be assigned

Group Art Unit: To be assigned

Filing Date: On even date herewith

Examiner: To be assigned

For: SYSTEM AND METHOD FOR  
PREDICTING CHROMOSOMAL  
REGIONS THAT CONTROL  
PHENOTYPIC TRAITS

Attorney Docket No.: 9080-016-999

**SUBMISSION OF COMPACT DISC**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In connection with the above-identified application, Applicants submit herewith one compact disc ("Copy 1") and a copy of the compact disc ("Copy 2") pursuant to 37 C.F.R. §§ 1.52(e)(3)(ii). "Copy 1" and "Copy 2" are identical. Applicants respectfully request the entry of the compact disc into the file. The machine format of each compact disc is IBM-PC, and the operating system compatibility is MS-DOS and MS-Windows.

The size of the files contained on the compact disc, their date of creation, their time of creation, and their name are found in the table below. In the table, each row represents a file, the size of the file in bytes is provided in column one, columns two and three respectively represent the date and time of file or directory creation while the fourth column represents the name of the file or directory.

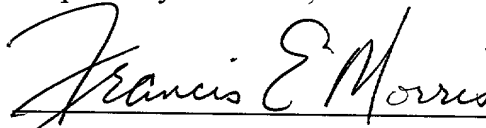
**Table 1. Contents of the Computer Program Listing Appendix**

Size	Date of Creation	Time of Creation	File Name
32,366	12-10-01	3:35pm	Digidisease.pl
33,987	12-10-01	3:36pm	Display_dev.pm
11,837	12-10-01	3:36pm	Input_output_dev.pm
6,583	12-10-01	3:36pm	Locus_matrix.pl
5,141	12-10-01	3:35pm	Matrix_generator.pl

No fees are believed due in connection with this submission. However, if it is

determined that additional fees are due, please charge them to Pennie & Edmonds LLP  
Deposit Account No. 16-1150. A copy of this sheet is enclosed for accounting purposes.

Respectfully submitted,



Date: December 11, 2001

Francis E. Morris (Reg. No. 24,615)

**PENNIE & EDMONDS LLP**

3300 Hillview Avenue

Palo Alto, California 94304

(650) 493-4935

Enclosures